

Map
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[0065] In another aspect hereof, the A and B registers of the 2^N Gold code generators each having N stages may be loaded as follows in response to the indicated received chip values C_j :

$$A_{i,N-1-j}[:, :] = \frac{1 - (-1)^{\text{floor}(i \cdot 2^{-j})}}{2} \quad (1)$$

$C_j[:, :] = 0$	$B_{i,N-1-j}[:, :] = A_{i,N-1-j}$	(2)
$C_j[:, :] = 1$	$B_{i,N-1-j}[:, :] = \text{mod}(A_{i,N-1-j} + 1, 2)$	

where: i is a range variable from 0 to $2^N - 1$, C_j is the j -th received chip, $j = 0$ to $N - 1$, and $\text{floor}(x)$ is the integer value of x . It may be noted that in the above pre-loading aspect, the values in the 1-register are a function of the chip index " j " but not the chip value " C_j ." Those skilled in the art will note that, in accord with equation 1 above, the value loaded in the a-register of each Gold code generator is therefore not dependent on the received chip value. Therefore, the a-register of each generator may be pre-loaded at initialization of the receiver and need not be modified in response to received chips. The values to be pre-loaded into each a-register may therefore be statically saved in a memory component such as a read-only memory (ROM) or other similar memory component.